**Department of Energy**
**Ohio Field Office**
**Fernald Area Office**
P. O. Box 538705
Cincinnati, Ohio 45253-8705
(513) 648-3155

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OCT 16 2000

Mr. James A. Saric, Remedial Project Manager
U.S. Environmental Protection Agency
Region V-SRF-5J
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

DOE-0025-01

Mr. Tom Schneider, Project Manager
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, Ohio 45402-2911

Ms. Val Orr
Division of Drinking and Ground Waters – UIC Unit
Ohio Environmental Protection Agency
P.O. Box 1049
1800 Watermark Drive

Dear Mr. Saric, Mr. Schneider, and Ms. Orr:

**RESPONSE TO THE OHIO ENVIRONMENTAL PROTECTION AGENCY COMMENT ON THE MONTHLY RE-INJECTION OPERATING REPORTS FOR FEBRUARY, MARCH, AND APRIL 2000**

This letter submits the response to the Ohio Environmental Protection Agency (OEPA) Comment on the Monthly Re-Injection Operating Reports for February, March, and April 2000.

If you have any questions or concerns regarding this, please contact Robert Janke at (513) 648-3124.

Sincerely,

Johnny W. Reising
Fernald Remedial Action
Project Manager

FEMP:R.J. Janke

Enclosure



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cc w/enclosure:
R. J. Janke, OH/FEMP
G. Jablonowski, USEPA-V, SRF-5J
T. Schneider, OEPA-Dayton (three copies of enclosure)
F. Bell, ATSDR
M. Schupe, HSI GeoTrans
R. Vandegrift, ODH
F. Hodge, Tetra Tech
D. Brettschneider, Fluor Fernald Inc./52-5
K. Broberg, Fluor Fernald Inc./52-5
W. Hertel, Fluor Fernald Inc./52-5
M. Jewett, Fluor Fernald Inc./52-2
AR Coordinator, Fluor Fernald, Inc./78

cc w/o enclosure:
N. Hallein, EM-31/CLOV
A. Tanner, OH/FEMP
D. Carr, Fluor Fernald, Inc./2
T. Hagen, Fluor Fernald, Inc./65-2
J. Harmon, Fluor Fernald, Inc./90
S. Hinnefeld, Fluor Fernald, Inc./31
U.Kumthekar, Fluor Fernald, Inc./65
T. Walsh, Fluor Fernald, Inc./65-2
ECDC, Fluor Fernald, Inc./52-7

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# RESPONSE TO OEPA COMMENT ON THE MONTHLY RE-INJECTION OPERATING REPORTS FOR FEBRUARY, MARCH, AND APRIL 2000

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT
FERNALD, OHIO

OCTOBER 2000

U.S. DEPARTMENT OF ENERGY

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# RESPONSE TO OEPA COMMENT ON THE MONTHLY RE-INJECTION OPERATING REPORTS FOR FEBRUARY, MARCH, AND APRIL 2000

Commenting Organization: Ohio EPA Commentor: HSI GeoTrans, Inc.
Section #: N/A Pg. #: 2 Line #: 16 Code: C
Original Comment #: 1

Comment: We agree that the routine increase of the re-injection rates by 10 percent to compensate for downtime and to take advantage of excess treatment capacity is desirable from an operational standpoint. Are the baseline extraction rates sufficient to maintain capture during periods when the higher re-injection rates are in effect? It is our understanding the extraction rates from the South Field and South Plume extraction wells have not been increased to compensate for the increase in injection. Provide justification.

Response: Extraction rates from the South Field and South Plume Optimization Wells (6 & 7) are increased to compensate for the increase in reinjection. When re-injection rates are increased by 10%, pumping rates are also raised 10% in the South Field Extraction Wells, and 20% in the South Plume Optimization Wells (Wells 6 & 7).

One of the observations made during the Re-injection Demonstration was that re-injection had no apparent impact on hydraulic control of the plume. Re-injection is taking place in an area of the plume that is under the influence of pumping wells. Pumping in the South Plume and South Field establishes a stagnation zone between the two systems in the location of the re-injection wells.

Direct push sampling conducted south of the re-injection wells showed that re-injection served to flush contamination from the sampling points. As presented in Table 4-1 of the Demonstration Report, the water level rise produced within 25 feet of the re-injection wells was only approximately 1 foot or less: Not enough to affect capture. The slight increase in injection rates at the end of some months (20 gpm per well or less) will provide for increased flushing but will have no real impact on hydraulic capture of the plume.

Action: No action required.